| | Application No. | Applicant(s) |
|---|---|---|
| **Notice of Allowability** | 10/677,732 | HERNACKI ET AL. |
| | **Examiner** | **Art Unit** | |
| | Samson B. Lemma | 2132 | |

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address--*

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *RCE filed on 08/31/2007*.

2. ☒ The allowed claim(s) is/are *1-11 and 17*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: \_\_\_\_\_ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_ .

**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *held on 09/11/2007* .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other \_\_\_\_\_ .

## *DETAILED ACTION*

1.      The request filed August 31, 2007 for a request for continued examination (RCE) under 37 CFR 1.114 based on patent application 10/677,732 is acceptable and an RCE has been established.

Claims **12-16 and 18-20** are canceled. Thus claims **1-11 and 17** are pending.

## *EXAMINER'S AMENDMENT*

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with **William J. James (Registration No. 40,661)** on 09/11/2007.

The application has been amended as follows: In the claims

1.  (Currently Amended) A method for remotely activating a covert service channel comprising:

receiving at a host a trigger sequence sent by a remote client to the host via a transport mechanism, the trigger sequence comprising a series of attempts to connect to the host via a prescribed sequence of two or more trigger ports;

authenticating the remote client based at least in part on receipt of the trigger sequence; and

opening the covert service channel to allow the authenticated remote client to communicate with the host via the covert service channel;

wherein the prescribed sequence is provided only to authorized users of the covert service channel and is not made available to unauthorized users and the covert service channel effectively is hidden from a random port scanner configured to scan ports in a random sequence rather than in the prescribed sequence.

11.     (Currently Amended) A system for remotely activating a covert service channel comprising:

a communication interface configured to receive a trigger sequence sent by a remote client via a transport mechanism, the trigger sequence comprising a series of attempts to connect to the system via a prescribed sequence of two or more trigger ports; and

a processor coupled to the communication interface and configured to authenticate the remote client based at least in part on the received trigger sequence and open the covert service channel to allow the authenticated remote client to communicate with the system via the covert service channel;

wherein the prescribed sequence is provided only to authorized users of the covert service channel and is not made available to unauthorized users and the covert service channel effectively is hidden from a random port scanner configured to scan ports in a random sequence rather than in the prescribed sequence.

17.     (Currently amended)  A method for remotely activating a covert service channel comprising:

sending a pre-defined trigger sequence to a remote host, the trigger sequence comprising a series of attempts to connect to the remote host via a prescribed sequence of two or more trigger ports;

waiting for a pre-defined time period;

sending a connection request to a covert service channel port on the remote host after the pre-defined time period has expired; and

establishing a connection over the covert service channel with the remote host;

wherein the prescribed sequence is provided only to authorized users of the covert

service channel and is not made available to unauthorized users and the covert service

channel effectively is hidden from a random port scanner configured to scan ports in a

random sequence rather than in the prescribed sequence.

## *Allowable Subject Matter*

2.     **Claims 1-11 and 17** are allowed.

3.     The following is an examiner's statement of reasons for allowance:

4.     As the result of Examiner's amendment,

*     Independent claims 1, 11 and 17 are amended as shown above.

5.     Referring to **the independent claims 1, 11 and 17, Dalgic, the reference on**

**the record, discloses each and every** limitations of the independent claims before the

claims were amended as shown below.

**For instance,**

**Referring to independent claims 1, 11 and 17, Dalgic discloses a method**

**for remotely activating covert service channel comprising:**

*     **Using a transport mechanism to send a trigger from a remote client**

**to a host; [column 7, lines 6-8]** *(wherein said hub/switch is for detecting a connection*

*to a portable computer system and for performing authentication in response thereto);*

*     **Receiving the trigger; [Column 7, lines 9-11]** *(wherein said cradle is for*

*receiving user authentication data from said portable computer system and transmitting*

*said user authentication data to said server);*

*     **Authenticating the trigger; and opening the covert service channel**

**to allow a connection with the remote host. [Column 7, lines 12-20]** *(wherein said*

*server is for **opening a port on** said hub/switch allowing said ethernet phone to*

*communicate voice data over said LAN and also allowing said cradle access to said LAN*

*provided said authentication is successful and otherwise for causing said hub/switch to block said ethernet phone and said cradle from accessing said LAN and said server for closing said port in response to detecting operational variations that are unfamiliar to said LAN.)*

Furthermore,

Referring to **the independent claims 1, 11 and 17, another reference namely Tonnby, the reference on the record, discloses each and every** limitations of the independent claims before the claims were amended as shown below.

**For instance,**

**Referring to independent claims 1, 11 and 17, Tonnby discloses a method for remotely activating covert service channel comprising:**

- **Using a transport mechanism to send a trigger from a remote client to a host; Receiving the trigger; Authenticating the trigger; and opening the covert service channel to allow a connection with the remote host. [Paragraph 0119]** (*For the handler of mobile service agents to determine if the user is allowed to attach at a new user port various methods can be used to ensure the authenticity of the roaming device. For wired scenarios, where a user disconnects the Ethernet wire and reconnects it at another port it may suffice that it is checked that the device MAC address is no longer connected to the previous user port. However in general, and in particular when using WLAN access methods a more secure method is needed. **To achieve this, an authentication procedure, such as described in [4] is triggered by the handler of mobile service bindings, and only upon successful authentication the penult is informed to open the user port for the mobile service binding.***)

▶ However after the independent claims are amended, **it is been found that the limitations are not suggested by the reference on the record, namely** neither **Dalgic nor Tonnby** discloses a method for remotely activating a covert service channel comprising:

receiving <u>at a host a trigger sequence sent by a remote client to the host via a</u>

<u>transport mechanism,</u> the trigger <u>sequence comprising a series of attempts to connect to</u>

<u>the host via a prescribed sequence of two or more trigger ports</u>;

authenticating the <u>remote client based at least in part on receipt of the trigger</u>

<u>sequence</u>; and

opening the covert service channel to allow the <u>authenticated remote client to</u>

<u>communicate with the host via the covert service channel</u>;

<u>wherein the prescribed sequence is provided only to authorized users of the covert</u>

<u>service channel and is not made available to unauthorized users and the covert service</u>

<u>channel effectively is hidden from a random port scanner configured to scan ports in a</u>

<u>random sequence rather than in the prescribed sequence</u>.


None of the prior art of record taken singularly of in combination teaches or

suggests a distinct method **for remotely activating a covert service channel**

**comprising the limitation recited above.** The examiner asserts that the limitation

recited on the respective independent claims after amendment are novel.

For the reasons provided above, the amended independent claims **1, 11 and 17**

are allowed.

7.      **The dependent claims 2-10, which are dependent on the independent**

**claim 1,** being further limiting to the independent claims, definite and enabled

by the specification are also allowed.

Any comments considered necessary by applicant must be submitted no later

than the payment of the issue fee and, to avoid processing delays, should

preferably accompany the issue fee. Such submission should be clearly labeled

"Comments on Statement of Reasons for Allowance."
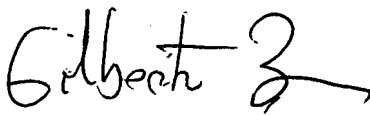

## *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samson B Lemma whose telephone number is 571-272-3806. The examiner can normally be reached on Monday-Friday (8:00 am --4: 30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BARRON JR GILBERTO can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**SAMSON LEMMA**
S•L•
**09/12/2007**

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